



# OPERATOR'S / PARTS MANUAL

## CLASSIC ELECTRIC TILLER

P/N 7250





## **Welcome to the World of Mantis Gardening**

1. Here's your new Mantis Electric Tiller . . . the lightweight wonder that's "Changing the Way Americans Garden®."
2. Unlike big tillers, your Mantis Electric Tiller weighs only 21 pounds. So it lifts easily, handles smoothly, tills and weeds precisely. And, unlike other small tillers, it features serpentine tines that churn soil to ten inches deep. It creates a soft, smooth seed bed, even in problem soil.
3. Once you know how to use your tiller correctly, we guarantee you'll love it. So first, please read this manual. It shows, step by step, how to use your tiller safely.
4. If you have questions about any topic in this Manual, or for the name of your local dealer, call 1-800-366-6268 toll free, Monday - Friday, 8:00 a.m. to 5:00 p.m., Eastern Time.

### **ATTENTION MANTIS PRODUCT OWNERS!**

**Get maintenance tips for your Mantis product on our web site at [www.mantis.com](http://www.mantis.com)**



**Mantis® Classic Electric Tiller**



## IMPORTANT MESSAGE

Thank you for purchasing this Schiller Grounds Care, Inc. product. You have purchased a world class product, one of the best designed and built anywhere.

This machine comes with Operation and Safety instructions, Parts and Service instructions and Engine instructions. The useful life and good service you receive from this machine depends to a large extent on how well you read and understand these manuals. Treat your machine properly, lubricate and adjust it as instructed, and it will give you many years of reliable service.

Your safe use of this Schiller Grounds Care, Inc. product is one of our prime design objectives. Many safety features are built in, but we also rely on your good sense and care to achieve accident-free operation. For best protection, study the manuals thoroughly. Learn the proper operation of all controls. Observe all safety precautions. Follow all instructions and warnings completely. Do not remove or defeat any safety features. Make sure those who operate this machine are as well informed and careful in its use as you are.

See a Schiller Grounds Care, Inc. dealer for any service or parts needed. Schiller Grounds Care, Inc. service ensures that you continue to receive the best results possible from Schiller Grounds Care, Inc. products. You can trust Schiller Grounds Care, Inc. replacement parts because they are manufactured with the same high precision and quality as the original parts.

Schiller Grounds Care, Inc. designs and builds its equipment to serve many years in a safe and productive manner. For longest life, use this machine only as directed in the manuals, keep it in good repair and follow safety warnings and instructions. You'll always be glad you did.

**Schiller Grounds Care, Inc.**  
1028 Street Road  
Southampton, PA 18966-4217  
PHONE 800-366-6268 • FAX 215-956-3855

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This Operator's / Parts Manual is part of the machine. Suppliers of both new and second-hand machines must make sure that this manual is provided with the machine.



## Safety Rules & Warnings

1. You will notice Safety Rules and Important Notes throughout this owners' manual. Make sure you understand and obey these warnings for your own protection.

### I. SPECIAL SAFETY INFORMATION

**! WARNING**

Attention: This symbol points out our important safety instructions. When you see this symbol, **! heed it's warning!! Stay alert!!**

**! WARNING**

To reduce the potential for accidents, comply with the safety instructions in this manual. Failure to comply may result in serious personal injury, and/or equipment and property damage.

### II. SAFETY & WARNINGS

**! WARNING**

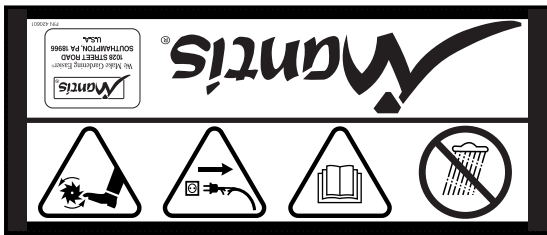
Improper use or care of this tiller or failure to wear proper protection can result in serious injury. Read and understand the rules for safe operation and all instructions in this manual. Wear hearing and eye protection.

**! WARNING**

If the tiller is used improperly or safety precautions are not followed, the users risk serious injury to themselves and others. Read and understand this manual before attempting to operate this tiller.

### III. SAFETY DECAL INFORMATION

1. An important part of the safety system incorporated in this tiller are the warning and information decals found on various parts of the tiller. These decals must be replaced in time due to abrasion, etc. It is your responsibility to replace these decals when they become hard to read. The location and part numbers (P/N) of these decals are illustrated on Page 15 and 16.



P/N 420601



P/N 420600



Cutting hazard; keep feet and hands away from rotating tines.



Do not use if electrical cords are damaged or broken



Read owner's manual before using tiller, or performing any repair or maintenance. Keep owners manual in a safe place.



Do not use in rain or wet conditions



Wear ear and eye protection.



Correct assembly.



Incorrect assembly.



Do not carry the tiller in this position.



## Safety Rules & Warnings

### IV. IMPORTANT EXTENSION CORD INFORMATION

1. Make sure the extension cords are in good condition before use.
2. Based on the total length of cord that you are going to use, check the chart to make sure the cord meets the correct minimum cord gauge (AWG) requirements.

#### IMPORTANT NOTE:

**Using an undersized cord, a larger number cord gauge (AWG) than recommended in the chart, will cause a loss in power and overheating of the Tiller.**

**Using a smaller number cord gauge (AWG), than recommended in the chart, is acceptable.**

Extension Cord Chart (minimum cord gauge (AWG))

Length (feet)	1 to 25	26 to 50	51 to 100	101 to 150
Cord gauge (AWG)	18	16	14	12

### V. WARNINGS - DOS

Read and understand the owner's manual. Pay particular attention to all sections regarding safety.

1. **Always** keep a firm grip on both handles while the tines are moving. BE AWARE!! The tines may coast after the triggers are released. Make sure tines have come to a complete stop before letting go of the tiller.
2. **Always** maintain a firm footing and good balance. Do not overreach while operating the tiller. Before you start to use the tiller, check the work area for obstacles that might cause you to lose your footing, balance or control of the machine.
3. **Thoroughly** inspect the area where equipment is to be used and remove all objects, which can be thrown by the machine.
4. **Always** keep area clear of children, pets, and bystanders.
5. **Always** stay alert. Watch what you are doing and use common sense. Do not operate unit when fatigued.
6. **Always** dress properly. Do not wear loose clothing or jewelry, they might get caught in moving parts. Use sturdy gloves. Gloves reduce the transmission of vibration to your hands. Prolonged exposure to vibration can cause numbness and other ailments.
7. **While working**, always wear substantial footwear and long trousers. Do not operate the equipment when barefoot or wearing open sandals.
8. **Always** wear eye protection. Eye protection must meet ANSI Z 87.1.
9. **Start** the tiller carefully, according to the instructions on page 9.
10. **Keep** all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
11. **Use** extreme caution when reversing or pulling the machine towards you.
12. **Work only** in daylight or good artificial light.
13. **Always** be sure of your footing on slopes.
14. **Exercise** extreme caution when changing direction on slopes.
15. **Always** keep a safe distance between two or more people when working together.
16. **Always** inspect your unit before each use and ensure that all handles, guards and fasteners are secure, operating, and in place. Be sure that all electrical cords are not damaged or broken.
17. **Always** maintain and examine your tiller with care. Follow maintenance instructions given in manual.
18. **Always** store tiller in a sheltered area (a dry place), not accessible to children.

### VI. WARNINGS - DON'TS

1. **Don't** use tiller with one hand. Keep both hands on handles with fingers and thumbs encircling the grips when the tines are moving.
2. **Don't** overreach. Keep a good footing at all times.
3. **Don't** run with the machine, walk.
4. **Don't** work on excessively steep slopes.
5. **Don't** attempt to clear tines while they are moving. Never try to remove jammed material before unplugging the cord and making sure the tines have stopped completely.
6. **Don't** allow children or incapable people to operate this tiller.
7. **Don't** operate while under the influence of alcohol or drugs.
8. **Don't** attempt to repair this tiller. Have repairs made by a qualified dealer or repairman. See that only original Mantis parts are used.
9. **Don't** run the tiller in rain or wet conditions.



## Assembly

### A. PARTS

Your Mantis Electric Tiller comes partially assembled. You must install only the handlebars, the handle brace, and the tines. This will take just a few minutes if you follow the directions.

First, take all items out of the carton. **But do not remove the cardboard from around the tiller's base.**

The list below, shows the parts that come with your tiller. Check to make sure you have them.

The bag of hardware is in the plastic bag containing the Operator's/Parts Manual.

To assemble your Mantis Electric Tiller, you'll need two 7/16" wrenches. We suggest that you install all nuts and bolts only "finger tight" — that is, one-half to one full turn — until you've completed assembly. **The nuts are self locking, but you must use a wrench to tighten them completely.**

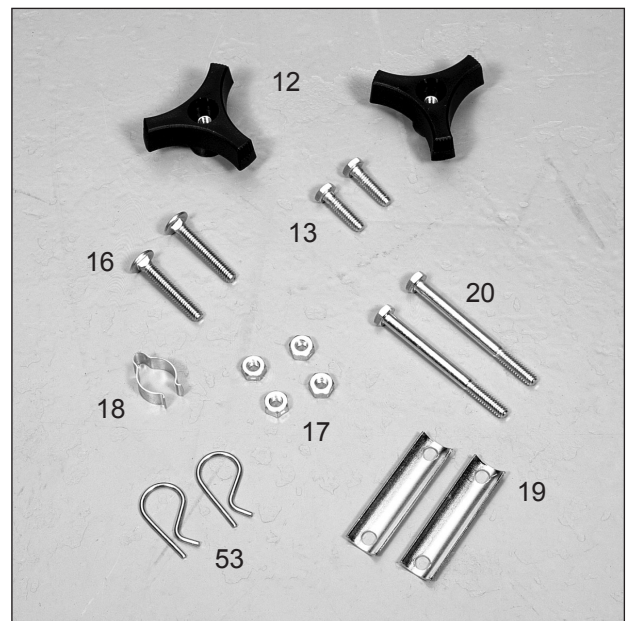
Key	Qty.	Description
7	1	Upper Handle Assembly
1	1	Upper Handle Trigger Assembly
10	2	Lower Handles
54/55	1	Pair tiller/Cultivator Tines
62**	1	Motor Assembly (includes Fender Guard, Worm Gear Transmission & Complete Housing)
14	1	Handle Brace
	1	Bag of Hardware Containing:
16	2	Round Head Square Neck Bolts
17	4	Lock Nuts
20	2	Bolts (3" long)
53	2	Tine Retaining Pins
19	2	Handle Clamps
13	2	Bolts (1" long)
12	2	Knobs
18	2	Cable Clamp

\*These numbers are the same numbers shown on the Parts Layout on pages 15 and 16.

\*\*This Key # is for assembly purposes only.

## WARNING

Improper assembly of this tiller can result in serious injury. Make sure to follow all instructions carefully. If you have any questions contact our factory at 1-800-366-6268 or an authorized dealer.

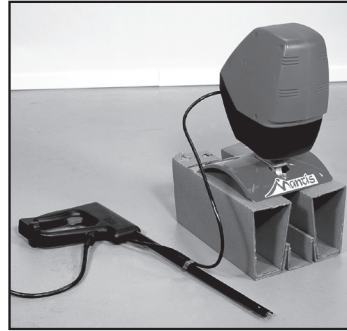




## B. LOWER HANDLE ASSEMBLY

To identify part numbers, see page 6 and 15.

1. **Use the protective cardboard sleeve to stabilize your tiller. Stand the motor assembly (#62) up. (Picture 1)**
2. Lay the handle parts within easy reach. You'll need one of the handle clamps (#19) and one of the lower handles (#10). Note that the lower handles have a short leg on one end.
3. Fit the handle clamp along the outside of the short leg. Line up the holes on the clamp and the leg.
4. Choose one of the two 3-inch bolts (#20). Slide it through the first set of holes — near the elbow where the lower handle curves. (Picture 2)
5. Now slide the other lower handle onto the 3-inch bolt. Fit the other clamp onto this other handle's short leg. Add a nut and tighten finger tight. (Picture 3)
6. Locate the worm gear housing. It starts just above — and extends down through — the tiller's red fender guard. You'll notice that there's a recessed channel on either side of the housing's top. (Picture 4.)
7. Take the lower handles that you've just put together. Slide them into the two recessed channels. (Picture 5.)  
Make sure you insert them from the rear of the tiller - so that the bolt fits along the back of the housing.
8. Slide the second 3-inch bolt through the second set of holes in the short legs and clamps. Add a nut and tighten finger tight.



Picture 1



Picture 2



Picture 3



Picture 4

### NOTE:

**The nuts are self locking, but you must use a wrench to tighten them completely.**



Picture 5

## Assembly

### C. UPPER HANDLE ASSEMBLY

1. Attach the upper handle assembly (#1) – the handle with the power cord – to the right lower handle (#10) and secure with the handle knob (#12), and cap screw (#16). (Picture 1 and 2)
2. Follow the same steps to install the left upper handle onto the left lower handle. (Picture 3)
3. Use the clip (#18) to secure the power cord in place on the lower handle. (Picture 4)
4. Now install the Handle Brace (#14). Line it up with the holes on the upper handles. Then insert a Bolt (#13) and a Lock Nut (#17) on either side (Picture 5)
5. Use a wrench to tighten Bolt (#13) and Lock Nuts (#17).
6. Now use wrench to tighten all nuts and bolts firmly and securely.



Picture 1



Picture 2



Picture 3



Picture 4



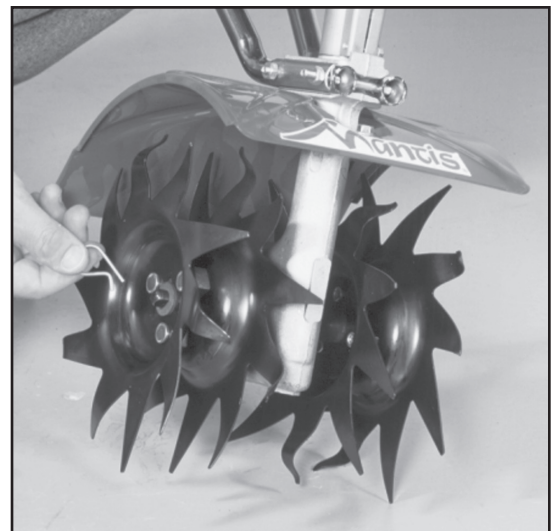
Picture 5

### D. ASSEMBLING THE TINES FOR TILLING

1. Remove the cardboard from around your tiller's base.
2. Slide the tines onto the axle shafts. The "D" hole goes on the outside.
3. Make sure you've installed the tines properly for tilling. Liken the tines to your fingers. When your palm faces the ground, your fingers curl down. Stand behind the tiller and hold your hand next to the tines. Do the tine blades curl down, as your fingers do? If so, they are in the tilling position. (To switch to the cultivating position, see page 11.)
4. To secure each tine to the axle, insert a tine retaining pin.

#### IMPORTANT NOTE:

Before you use your Mantis Tiller, read the Safety Rules & Warnings on pages 4-5.





## Before You Begin Tilling

### A. STARTING

Starting your Mantis Electric Tiller is easy.

1. Simply loop your extension cord through the built-in extension cord holder. This is provided to secure the extension cord and help prevent it from becoming detached.
2. Connect the extension cord to the power cord on the tiller. (Picture 1)
3. Plug the extension cord into an outlet.
4. Pick a speed. (Picture 2)

**CAUTION: This Tiller is Strong (Powerful). If you are starting the unit for the first time, the Tiller will start quickly. Be sure to start the Tiller in the low speed (#1), until you get used to it.**

5. Squeeze the triggers to begin tilling. (Picture 3)



Picture 1



Picture 2



Picture 3

### B. GETTING YOUR TILLER TO THE GARDEN

#### Walk it.

Put the tiller in 1st speed; you can “walk” it to your garden. Just squeeze the triggers and let the tiller “tip-toe” across your yard on its tines. It won’t hurt your lawn or driveway. (Picture 4)

#### Carry It.

Make sure the power cord is unplugged from the extension cord. Then use one hand to grasp the convenient carrying handle. Use the other hand to hold the handlebars. (Picture 5) Then lift your tiller and carry it to your garden. Since it weighs only 21 pounds, it won’t strain your muscles or tire you out!

#### Take It for a Ride.

You can easily transport your MANTIS Electric Tiller to a friend’s or relative’s house. Simply fold down the handles, then store your tiller in the trunk of your car or truck. It fits easily. And you can put it in and take it out without straining your back. (Picture 6)



Picture 4



Picture 5



Picture 6



Picture 7

## WARNING

Never carry your tiller as the person in picture 7 is doing. If you do, and the tines engage, you could suffer serious injury.

## Tilling

### **! WARNING**

The operator of this tiller is responsible for accidents or hazards occurring to himself, other people or their property.

#### **A. NOW YOU'RE READY TO USE YOUR MANTIS ELECTRIC TILLER**

If you've seen other tillers, your Mantis Electric Tiller may surprise you. It tills best when you pull it backward! When you pull your Mantis Electric Tiller backward, you give extra resistance to the tines, so they dig deeper. (Picture 1).

What's more, when you go backward, you erase footprints. So your soil stays light and fluffy. While other tillers, by contrast, you walk right over the soil you've just tilled, packing it down so it's less plantable.



Picture 1

#### **B. RUN YOUR MANTIS ELECTRIC TILLER LIKE A VACUUM**

Place your tiller at the head of the row or area you want to till. Turn it on. Then use an easy rocking motion. First, pull your tiller backward. Then use an easy rocking motion. Again, pull your tiller backward. Then let it move forward just a little bit. Then pull it backward again. This will help you till deeper.

Keep repeating these steps until you've tilled an entire row. Start again on the next row. It's a lot like running a vacuum. (Picture 2)



Picture 2

#### **C. YOU CAN EVEN CONTROL DEPTH**

##### **For Deeper Tilling:**

Move your tiller slowly back and forth, as you would a vacuum cleaner. Work the same area over and over until you've dug to your desired depth. (Picture 3)

##### **For Shallow Tilling:**

Switch the tines to the cultivating position. (See pg. 11 to learn how) Then move you tiller quickly over your soil surface.

##### **For Big Weeds or Tough Roots:**

Let your tiller rock back and forth over the tough spot, until the tines slice through the weed or root.



Picture 3

#### **D. YOUR MANTIS ELECTRIC TILLER HANDLES SPECIAL TILLING PROJECTS**

Want to turn part of your lawn into a colorful flower border?

Your Mantis Electric Tiller makes it easy! Just run your tiller back and forth until the sod begins to break up. Then continue tilling. Your tiller will chop the clumps of sod until they're fine. Then, it will work them into the soil. Pretty soon, you'll have a soft, fresh planting bed.

## WARNING

If your tines get jammed or entangled, turn off the tiller at once. Remove the obstruction only while the tiller is unplugged. Never try to remove an obstruction while the tiller is in the on position or plugged in. Serious injury can result.

### A. HOW ABOUT A FAMILY-SIZE VEGETABLE GARDEN?

Nowadays many gardeners prefer small gardens — especially in the suburbs, where space is at a premium. But, if you're fortunate enough to own a large lot, you can create a bigger garden — a half acre or more. Although your Mantis Tiller could handle the job, the project could be completed faster if you were to hire someone with a tractor or larger tiller to break the ground for you. This is a one-time-only investment that's well worth the small cost.

### B. YOUR MANTIS ELECTRIC TILLER MAKES WEEDING A PLEASURE!

As a tiller, your Mantis Tiller works the soil down to 10" (25.4 cm) deep. But, as a cultivator, it gently cultivates the surface, only 2" to 3" (5.09 cm to 7.62 cm) deep.

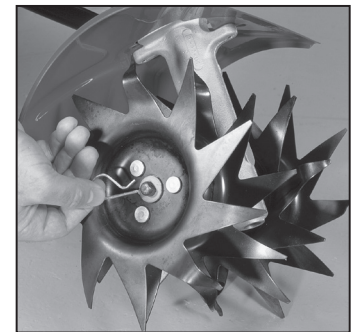
First, you must switch the tines to the weeding position. This takes less than a minute.

Then, your Mantis Electric Tiller's sharp "tine teeth" will slice up those pesky weeds, burying them as you go along. And, since the tines in this position won't dig too deep, they won't hurt your plants' precious root systems.

The result? Your tiller will cut your weeding time in half, and turn a tiresome chore into a pleasure.

### C. HOW TO SWITCH FROM TILLING TO CULTIVATING POSITION

1. Make sure your tiller is off and unplugged.
2. Remove the retaining pins from the tines.
3. Remove the tines from the axle.
4. Place the right-side tine onto the left-side axle. Place the left side tine onto the right-side axle. The "D" hole should be to the outside.
5. Here is how to make sure you've installed the tines properly. Stand behind the tiller and hold your hand, palm up, next to the tines. Do the tine points curl up, as your fingers do? If so, they are in the correct cultivating position. (See photos below)
6. Reinsert the pins.



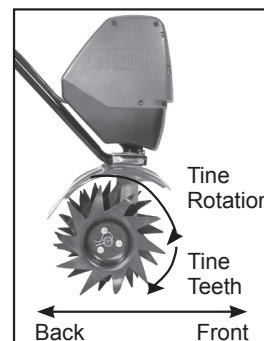
### D. NOW YOU'RE READY TO CULTIVATE OR WEED.

Guide your tiller where you want to weed and start it up. Pull your tiller backward slowly, then let it move forward a bit, in a gentle rocking motion. Watch it slice, shred, and bury those weeds!

Got tough weeds? Select a slower speed to slow your tiller down. Then work back and forth until your tiller chops up the weeds. It's easy and effective!

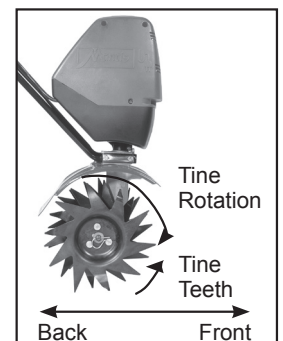
Remember, any tiller will tangle in tall grass, stringy vines, or super-big weeds. So, if you have a "backyard jungle," first use a knife, pruner, or brush cutter to chop up the overgrowth. If the tines become tangled anyway, turn the motor and unplug the tiller before trying to clear them.

The optional Tine Detangler (Item #1322) will clear tines in a jiffy. Contact your local authorized Mantis dealer or call 1-800-366-6268 to order.



**Tilling Position**

Tine teeth point in the same direction as the rotation of the tine; or toward the front of the tiller, away from the operator.



**Cultivating Position**

Tine teeth point in the opposite direction as the rotation of the tine. Tines point toward the back of the tiller, or toward the operator.





## Tilling/Cultivating

### E. YOUR MANTIS ELECTRIC TILLER WILL WEED BETWEEN NARROW ROWS!

Your Mantis Electric Tiller is a precision weeder that easily fits in tight places. So don't be afraid to weed anywhere: between plants and shrubs; in corners; against fences; on raised beds; in wide rows; even in very narrow rows. Your Mantis Electric Tiller weeds six\* to nine inches wide. So you can run it in a tightly planted garden without damaging your delicate plants. That's good news for suburban gardeners, who often have to plant rows close together!

\*With optional Planter/ Frowner attachment (Item #6222.)



## Troubleshooting

### A. WHAT TO DO IF YOUR ELECTRIC TILLER STOPS RUNNING

1. If nothing happens when you squeeze the triggers, make sure the tiller is plugged in or that the cord is not damaged.
2. If it still does not work, unplug the Electric Tiller from the power source.
3. Inspect the tines to make sure your tines are clear of rocks or debris. Clear any debris that may be preventing the tines from spinning.
4. Remove the tines to make sure all of the debris has been cleared.
5. Check the circuit breaker on the Electric Tiller. Make sure the button hasn't popped.
6. If the button has popped, press the button back in. If the circuit breaker button doesn't stay in, wait approximately 30 seconds and retry. (Picture 1)
7. Make sure that the circuit breaker hasn't been tripped at your power source: whether it's your house, a generator, or an outdoor outlet.



Picture 1

### B. HOW TO RESEAT THE MOTOR HOUSING

At some point, you may find that the tines won't turn when you squeeze the throttle. This may mean the motor isn't sitting all the way down on the worm gear housing.

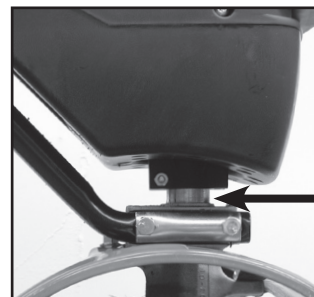
Perhaps you've been using your tiller for several years. The housing screw bolt (Key #22) may have come loose and lifted the motor up.

If this happened you'll notice a gap between the bottom of the bottom housing (Key #24) and the top of the worm gear housing. (Picture 2)

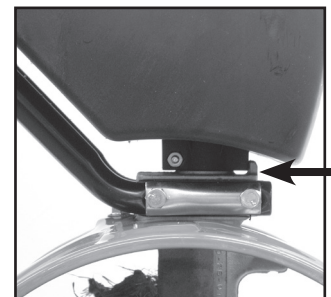
To fix this, loosen the housing screw. Take the motor and housing off the worm gear housing. Notice the hex head on top of the drive shaft (Key #21). Inside the bottom housing, you'll find the coupler driver (Key #26). Make sure the hex head lines up with the coupler driver inside the bottom housing.

Then put the motor back on the worm gear housing.

If you've followed these steps properly, there will be no gap between the bottom housing and the worm gear housing. (Picture 3) Make sure you tighten the housing screws!



Picture 2



Picture 3

## Troubleshooting

### C. THE TINES DON'T SEEM TO DIG LIKE THEY USED TO

If the tines are not performing as they did when you first bought the tiller, inspect them for excessive wear. If they are worn, you can order a new pair.

To order replacement Tines Contact your local authorized Mantis dealer or call 1-800-366-6268.

#### IMPORTANT NOTE:

To keep your Mantis Electric Tiller running as efficiently as possible, always make sure the tines are clear of rocks and debris.

If you continue to experience problems, call Mantis toll Free at 1-800-366-6268.

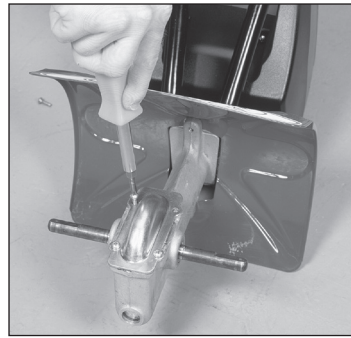
## Maintenance

### A. HOW TO CHECK THE GREASE LEVEL INSIDE THE WORM GEAR HOUSING

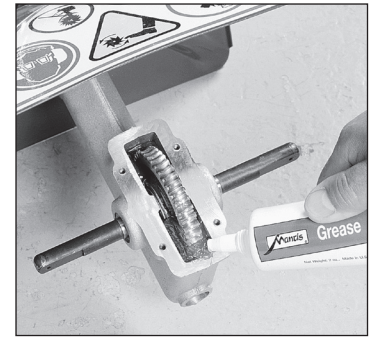
When we built your Mantis Electric Tiller, we lubricated the worm gear housing thoroughly.

It is imperative that you inspect the grease level once a year. Simply remove the cover plate on the worm gear housing. (Picture 1) Then check to make sure the grease comes almost to the top of the housing. If it doesn't, add lithium #0 grease (Item 9985.) This is the only way to add grease to the worm gear housing. (Picture 2) To purchase Mantis grease, contact your local authorized Mantis dealer or call 1-800-366-6268.

Please do not overfill. Too much grease can create pressure, which could cause seals to fail or the clutch to slip.



Picture 1



Picture 2

## Storage

1. Clean dirt, grass and other materials from the entire machine.
2. Wipe the tines with oil or spray them with WD-40, to prevent rusting.
3. Remove Tilling Tines or attachments and lightly oil tine shaft at least once a year.
4. Check the grease level in the gear housing, as described above.
5. Order new parts to replace any that are badly worn or broken. Contact your local authorized Mantis dealer.
6. Store your tiller in a clean, dry place. You can store with the handles in an extended position (Picture 3) or folded down. (Picture 4)
7. To fold down the handles, follow these easy steps: Loosen the handle knobs (#12), fold the handles forward or back. (Picture 4) Tighten knob securely. Your handles are now folded and ready to store in a smaller area.



Picture 3



Picture 4

#### IMPORTANT NOTE:

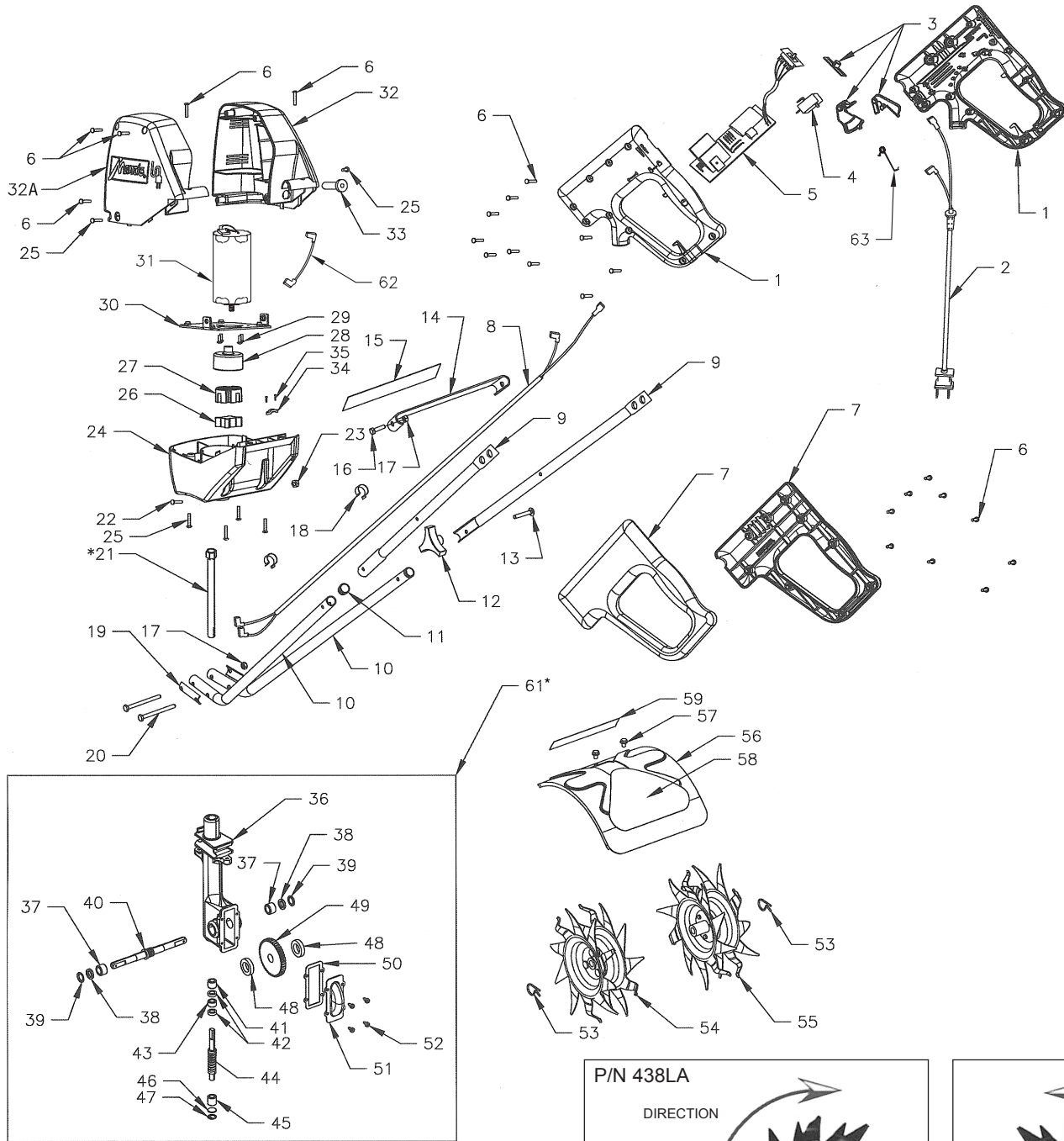
Handles can fold back or forward. When folding handles back, as show in picture #4, be careful not to damage the 3-speed switch.

### WARNING

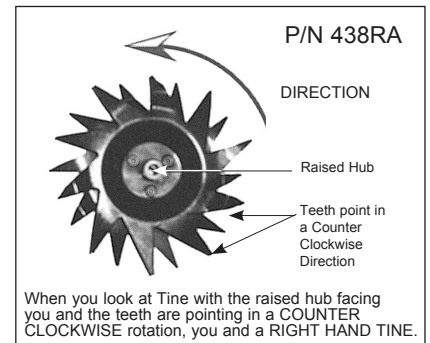
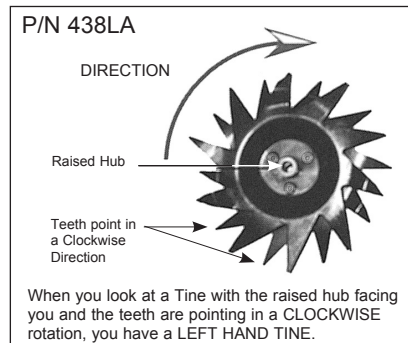
Always make sure the handle knobs are secure before starting your mantis tiller.



# Parts Explosion



\*Key #61 includes Key #21





## Parts List

Key	Qty.	Part No.	Description
1	1	420200	Handle, Right Side Assy
2	1	420206	Power Cord
3	1	420203	Trigger, Trigger lock, Button
4	1	3033	Switch Normally Open
5	1	420123	Assembled PC Board w/Switch
6	24	310500	#8-11 x 3/4 Combo SI Torx T-20 Pan Steel Plastite 45-1 Case Harden
7	1	420207	Handle, Left Side Assy
8	1	420127	Motor Cord
9	2	420213	Handle Upper FDH- Black
10	2	420214	Handle Lower FDH- Black
11	2	400230	Plug Handle
12	2	400523	Handle Knob
13	2	400509	Bolt
14	1	420113	Handle Brace
15	1	420601	Label Brace Elec. Tiller
16	2	410	Cap Screw 1/4-20 x 1" Lg.
17	4	972	Locknut 1/4-20
18	2	478	Cable Clamp
19	2	377	Handle Clamp
20	2	470	1/4-20 x 3" Bolt
21	1	468	Drive Shaft (Also in Key #61)
22	1	420513	8-32 x 7/8 6-Lobe Torx Equiv Pan M/S, with T-20 Driver Size
23	1	420514	8-32 Hex Machine Screw Nuts, Steel, Zinc
24	1	420134	Bottom Housing
25	6	420512	10-32 x 1/2 6-Lobe Torx Equiv Pan M/S, with Spec T-20 Driver Size
26	1	420224	Coupler Driver
27	1	420222	Coupler Shock Absorber
28	1	420223	Coupler Housing
29	4	420511	1/4-20 x 1/2 Socket Head Cap Screw, Plain Steel
30		420107	Motor Mounting Plate
31	1	420900	120V PM Motor

Key	Qty.	Part No.	Description
32	1	420131	Housing Set With Circuit Breaker
33	1	420128	Circuit Breaker
34	1	420252	Cable Clamp
35	2	3041	3.5 x 13mm Ph Pan Metric Tapping Screw DIN 7981, Steel, Zinc
36	1	466	Worm Gear Housing
37	2	432	Worm Gear Bearing
38	2	434	Bearing Seal
39	2	435	Bearing Seal Retainer
40	1	431	Tine Shaft
41	1	423	Roller Bearing
42	2	425	Worm Bearing Race
43	1	424	Worm Thrust Bearing
44	1	400204	Worm
45	1	458	Roller Bearing
46	1	426	Worm Disk
47	1	428	Retaining Ring
48	2	430	Worm Gear Thrust Washer
49	1	400205	Worm Gear
50	1	436	Gasket
51	1	420150	Housing Cover
52	4	651	Rd. Hd. Self Tapping Screw
53	2	418-1	Tine Retaining Hair Pin
54	1	438LA	Tine Assembly (L.H.)
55	1	438RA	Tine Assembly (R.H.)
56	1	465	Fender Guard
57	2	140	Bolt 1/4-20 x 3/8" Lg.
58	1	420600	Warning Fender Label
59	1	4058	Mantis Label
61	1	400011	Electric Tiller Trans w/ drive shaft Key #21
62	1	420129	Jumper Wire for Circuit Breaker
63	1	420110	Spring



## LIMITED WARRANTY

MANTIS extends this limited warranty against defects in material and workmanship for a period of five (5) years under normal usage for residential purposes and two (2) years under normal usage for commercial purposes, from the date of purchase by the original purchaser.

MANTIS will repair or replace, at its option, any part or parts of the product found to be defective in material or workmanship during the warranty period. Warranty repairs and replacements will be made without charge for parts or labor. All parts replaced under warranty will be considered as part of the original product, and any warranty on the replaced parts will expire coincident with the original product warranty. If you think your MANTIS TILLER is defective in material or workmanship, you must send it, along with your proof of purchase (sales receipt) to:

Mantis  
1028 Street Road  
Southampton, PA 18966

You are responsible for pickup and delivery charges; the product must be returned to us postage paid.

MANTIS assumes no responsibility in the event that the product was not assembled or used in compliance with any assembly, care, safety, or operating instructions contained in the Owner's Manual or accompanying the product. This limited warranty does not cover damages or defects due to normal wear and tear, lack of reasonable and proper maintenance, failure to follow operating instructions or owner's manual, misuse, lack of proper storage or accidents [or routine maintenance parts and service]. This limited warranty shall not be effective if your Mantis tiller has been subjected to negligence or has been repaired or altered by anyone other than an authorized dealer or authorized service center.

You must maintain your MANTIS TILLER by following the maintenance procedures described in the owner's manual. Such routine maintenance, whether performed by you or a dealer, is at your expense.

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Mantis  
1028 Street Road  
Southampton, PA 18966  
(215) 355-9700

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